

## STUDENTS' PERCEPTION OF GAMIFICATION IN A SOCIAL ENGLISH COURSE AT UNIVERSITY

Bui Ngoc Anh<sup>1</sup>, Nguyen Ngoc Anh<sup>2</sup>, Dinh Nguyet Ha<sup>3</sup>

<sup>1</sup>University of Foreign Languages and International Studies; [krystalbui09@gmail.com](mailto:krystalbui09@gmail.com)

<sup>2</sup>University of Foreign Languages and International Studies; [anhlp3122000@gmail.com](mailto:anhlp3122000@gmail.com)

<sup>3</sup>University of Foreign Languages and International Studies; [dinhnguyetha.2000hd@gmail.com](mailto:dinhnguyetha.2000hd@gmail.com)

### ABSTRACT

In the fourth industrial revolution, especially under the aftermath of COVID-19 pandemic, gamification has emerged and developed as an effective technique in assisting instructors and learners to fulfill the demand of teaching and learning language. As being a university student in the University of Languages and International Studies, having chances to be familiar with gamification, the researchers would like to investigate FELTE, ULIS sophomores' perception of gamification's effectiveness in a social English course thoroughly. Using survey research, data was gathered through a two-part questionnaire distributed among the whole population of 250 participants. The former part of the questionnaire was utilized to measure learners' perception of gamification's effectiveness, followed by the latter of the questionnaire to determine the most effectively used elements of gamification in a social English course. According to the study's results, most partakers held a positive attitude toward the utilization of gamification in general and all elements of the gamification process in particular. At the end of the study, some recommendations were suggested for future research into this topic.

Keywords: *gamification; effectiveness; attitude; elements; perception*

### 1. INTRODUCTION

#### 1.1 Research problem and rationale

In this day and age, with the outbreak of technological revolution, there has been an increasing need for employing digital technology in language teaching and learning environments. Especially under the effects of COVID-19 pandemic, a shift from traditional learning (face-to-face classes) to e-Learning (online classes) has lured instructors coupled with learners to seek for appropriate digital platforms with a view to enhancing the language classes' quality. Since language learning has been considered a long-term and complicated process, language learners need to be physically, mentally, and emotionally involved in learning to be able to successfully acquire the language (Garcia, 2017). Instructors are additionally required to utilize different methods so as to keep learners engaged and motivated during the lessons. Gamification, consequently, appears as a fruitful technique in facilitating instructors to satisfy the demand of learning and teaching language in the fourth industrial revolution.

Initially, scientific literature suggests that learning language in gamified environments could increase learners' motivation, engagement, and provide students with freedom to fail without fear during the learning process (Lee & Hammer, 2011). Gamification, however, has not been widely proven to be able to successfully produce academic outcomes of language learners. In addition to the lack of empirical evidence of positive impacts on academic achievement, there has not been much research concerning the effects of gamification in language classes, especially in English classes. Besides, regarding the effectiveness of gamification in language learning, several previous researchers (Alomari et al, 2019; Zicherman & Cunningham, 2011) have just extracted the related information from secondary research and focused predominantly on teachers' perception of gamification in teaching combined with learning language without providing learners' perspective. As a result, this research needs conducting with the aim of filling the important gaps of previous research. The study is hoped to address the effectiveness of gamification in learning English from second-year students' perspective, thus eliciting the response to the question "What is FELTE, ULIS sophomores' perception of gamification and its effectiveness in English classes?".

### **1.2 Research questions**

(1) What is FELTE, ULIS sophomores' perception of the effectiveness of gamification in English classes?

(2) What elements are most effectively used when gamification is applied in English classes at FELTE, ULIS as perceived by the students?

### **1.3 Aims and objectives of the study**

First and foremost, this paper seeks to investigate FELTE, ULIS second-year students' perception of gamification in English classes. Additionally, attention would also be paid to the most effectively utilized element of gamification in teaching and learning English. In short, this paper would examine:

- FELTE, ULIS sophomores' perception of gamification in English classes
- the most effectively used element of gamification in English classes.

### **1.4 Significance of the study**

Although this study was conducted in the context of FELTE only, the researchers hope that the results could: gain a clearer insight of how FELTE, ULIS sophomores see the effectiveness of gamification employment in English classes; facilitate teachers in designing gamification for teaching English by equipping teachers with the most productively used elements of gamification; and provide documentary sources related to gamification to Vietnamese research field.

## **2. LITERATURE REVIEW**

A shift from traditional teaching to innovative methods in the field of education has been observed thanks to the advent of technology. One of them is gamification techniques, which are commonly applied in university education. The ensuing section

will focus on gamification elucidation. Afterwards, the related works concerning this paper's interest would be presented.

## **2.1 Key terms**

### **2.1.1 Gamification**

The technological advancement for the past decades has promoted constant changes in daily activities. Particularly, in the educational field, technology has provoked novel methods of learning from an innovative standpoint, which attaches special importance to learner-centered approach. As a result, numerous original tactics have been developed, among which is gamification.

Gamification had not been cemented as a term until its earliest published document in 2008 according to Deterding et al. (2011a). Dale (2014), nevertheless, suggested that the term 'gamification' was first used by Nick Pelling in a computer games context in 2002. Either argument, it was only not until 2010 that gamification experienced a prevalent adoption by the scientific community (Deterding et al., 2011a). Since that time, gamification has received increasing interest by academia albeit with varying interpretations.

One of the most influential experts in the area of gamification is Sebastian Deterding. In 2011, a group of researchers led by Deterding assumed the definition of gamification as "the use of game design elements in non-game contexts" (Deterding et al., 2011a, p. 10). In other words, gamification refers to the incorporation of design elements to systems or activities that do not normally have any game-like characteristics. This definition could be criticized to be quite simple, disregarding the use of digital technology.

In the same year of 2011, Zichermann and Cunningham's (p. xiv) book *Gamification by Design* proposed a much broader concept than in Deterding et al.'s by attempting to illustrate the inspiring purposes as "the process of game-thinking and game mechanics to engage users and solve problems". Despite the broadness of the concept by identifying the potential goals of gamification, Zichermann and Cunningham might exclude the environment where gamification is applied.

Zichermann and Cunningham's (2011) definition was also developed by Kapp (2012, p. 10), who underlined several other objectives that gamification was expected to attain. According to Kapp, "gamification is using game-based mechanics, aesthetics, and game-thinking to engage people, motivate action, promote learning, and solve problems". Kapp's major focus is to regard gamification as a learning-promoting instrument. The scholar argues that various gamification techniques (e.g. point systems), which have long been employed, have their establishments in educational psychology. His argument is that the distinction between these educational practices and gamification is the manner in which gamification incorporates those elements to produce game-like experiences.

While Werbach and Hunter's (2012) interpretation bears certain resemblance to that of Deterding et al. (2011a), referring to "the use of game elements and game-design

techniques in non-game contexts”, this definition implies a distinctive concept of game elements and differentiates game-design techniques from game elements in order to accentuate that successful gamification goes far beyond just simply including a few elements.

Though several viewpoints of different scholars on what constitutes gamification have been considered, the final definition by Werbach & Hunter appears to be foremost general and applicable for the aim of this research. This definition is, therefore, used thoroughly in this study.

### **2.1.2 Elements of gamification**

“Game elements” could be defined as “elements that are characteristic to games” (Deterding, et al., 2011). In other words, the regular patterns used in the game design are known as game elements. Some of these elements are seen in most of the games nowadays, including: points, badges, leaderboards, progress bars, performance graphs, quests, levels, avatars, social elements, and rewards. Based on the levels of abstraction, game elements are classified into different categories. Deterding and associate (Deterding et al., 2011) assort game elements by game design levels: interface patterns (e.g., badges, leaderboard, levels); game mechanics (e.g., time constraints, limited resources, turns); game heuristics (e.g., constant play, clear goals, game stiles); game models (e.g., challenges, fantasy, curiosity); and game design methods (e.g., testing, play centric design, participatory design). In this research, the scholars concentrate on the division of game elements into three categories - dynamics, mechanics, and components (Werbach & Hunter, 2012). Figure 1 pictures a combination of the gamification pyramid containing the elements based on the hierarchy proposed by Werbach and Hunter in 2015.

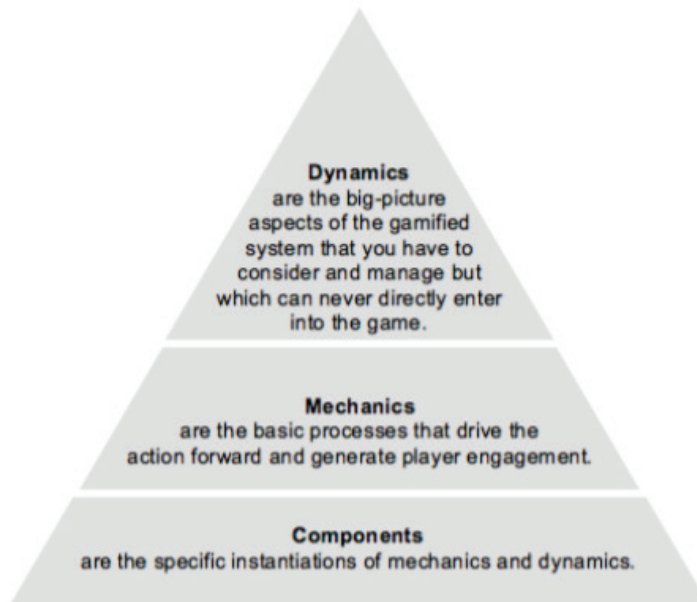


Fig. 1 - The hierarchy of game elements (Werbach & Hunter, 2015)

Among three categories, dynamics are the most “intangible” elements. Specifically, game dynamics typically are instantiated in emotions, constraints, progression perception, narratives, and relationships. Dynamics contains some of the primary aspects of the gamified system that have to be considered and managed, but not directly implemented into games. Game mechanics are described as the fundamental actions, processes, and control mechanisms that are applied to “gamify” an activity and to create engaging experiences for learners (Bunchball, 2010). Mechanics include challenges, chances, competition, cooperation, feedback, resources acquisition, rewards, transactions, turns, win states. Components, the lowest level of abstraction, are the specific forms of mechanics and dynamics. They can appear in the form of achievements, avatars, badges, gifts, leaderboards, level, points, quest, just to exemplify.

Those three elements, dynamics, components, and mechanics illustrate different interconnected levels. Specifically, each of the mechanics offers a way to implement one or more dynamics in a game and, similarly, components are tied to one or more of these higher-level elements.

## **2.2 Related studies**

In this part, related studies are going to be reviewed to thoroughly scrutinize the research paper in context, and explore the research gap. In that way, the application of this study can be justified.

### **2.2.1 Effectiveness of gamification**

The role of gamification in improving learners’ achievement has previously been examined by empirical scholars, but the mixed results have been gathered.

#### *2.2.1.1 Positive effects*

There have been a wide range of studies praising gamification as an enjoyable and effective method to support learning and to narrow down the gap between students’ learning and educational practice.

According to Jayasinghe and Dharmaratne (2003), the integration of gamification in learning could help students unconsciously follow the learning process of Bloom’s taxonomy (including remember, understand, apply, evaluate, analyze, and create). This research surpassed others by applying a mixed method, in which it combined comparing two groups’ results and utilizing questionnaires. The process of making comparisons between two groups’ marks (one doing the quiz for gaming components and the other doing the quiz for gamified components) was carefully carried out and clearly stated in the paper; however, the procedure of designing and delivering the questionnaire was not clearly explained. Besides, information on how to choose the sampling should be further provided. Participants of the research are tertiary students from Computer Science, hence, found results might not be applied to language learners.

The shared idea of gamification’s effectiveness in enhancing learners’ engagement and motivation has been witnessed in several previous studies. Specifically, gamification is among the instructional methods that inspire students and promote their commitment

in class (Millis, Forsyth, Wallace, Graesser, & Timmins, 2017). It is a tool to boost students' motivation and engagement during the learning process (Alomari et al, 2019).

Several studies (Davis, Sridharan, Koepke, Singh, & Boiko, 2018) found positive consequences of gamification techniques on supplying the curriculum with a comprehensive activity on account of its benefits regarding influence on students' sense of competition, communication and motivation.

#### *2.2.1.2 Negligible effects*

On the other hand, a multitude of studies have proved the opposite. Many showed that gamification elements might not generate the best learning results for students (Ding, Er, & Orey, 2017). Similarly, Ding, Kim, and Orey, 2017 discovered that students' scores were not considerably boosted because most pupils found the protocol of gamification unfamiliar. Some learners needed more time to comprehend the gamification process.

All of the above papers have been researched around the world with different outcomes. Most of them display optimistic or at least modest effects of gamification on learners' engagement and motivation; however, there is a shortage of studies focusing on students' perception. Hence, the first and foremost objective of our study is to determine the effectiveness of gamification as perceived by undergraduate students in Vietnam. It is necessary to discover whether this learning method can be helpful for English learners in the context of Vietnam.

#### *2.2.2 Game elements*

Even though these publications claimed both optimistic and pessimistic effects of gamification on learners' learning experiences as aforementioned, few past studies pay attention to which particular gamification elements are directly or indirectly accompanied with efficient implementation of this method in English classes. A rich variety of studies on many aspects of gamification has been carried out, namely gamification in education with a view to producing a literature (Deterding et al., 2011; Zicherman & Cunningham, 2011); recommendations on how to exploit gamification more effectively (Lee & Hammer, 2011; Muntean, 2011); effects on students' performance, motivation, attitudes, and habits (Faghihi et al., 2014). However, there is a shortage of studies with the aim to build a correlation or ranking among the elements of the gamification in learning procedure.

Most prominently, the research on "Students' Perceptions about Gamification of Education" was the one that bore close resemblance to our study the most. Conducted with Q methodology by Ibrahim Yildirim in 2017, it also aimed to determine how the gamification of the educational process is perceived by students, and to highlight the prominent elements of gamification. The participants of the study consisted of 34 sophomores in elementary mathematics education in the Faculty of Education, and they had taken the Instructional Principles and Methods course in a gamification design. According to the research findings, students have a common positive thought about the educational gamification procedure. Moreover, the prominent elements of this process are logic of the process, emotions towards the procedure, advancement



structure, achievement points, and badges. Our study will exploit its strengths in terms of methodology and discussion, as well as address the problem of small sampling.

### **3. METHODOLOGY**

#### **3.1 Research design**

The researchers selected a quantitative approach, following a survey design, which indicates that a specific field is studied involving the collection of data from a sample of elements (sophomores) drawn from a well-defined population (all sophomores in the FELTE, ULIS, VNU) through the use of questionnaires (Babbie, 1990; Fowler, 1988).

This type of research has been considered a decent tool by the researchers on the grounds that it is a fruitful and legitimate approach to gather quantitative data among a large number of samples. Moreover, the utilization of this approach ensures the surveyees' anonymity and confidentiality. According to Creswell (2002), a questionnaire does not necessarily require the respondent's name, class, or other background information so that the survey takers could anonymously respond to questionnaires. The adapted questionnaires by the research group also share the same characteristic, in which the participants are under no obligation to reveal their names, their major class and their email.

#### **3.2 Setting**

The research is conducted in the University of Languages and International Studies, during the first semester of the school year 2020-2021. The said setting is decided due to the reason of convenience, since the researchers are all students of the university above.

#### **3.3 Participants**

The participants of this research are the second-year students of the Faculty of English Language Teacher Education, regardless of their major. The total number of the targeted subjects is around 614 students, according to the student list that was obtained from the website of the faculty. The researchers, in fact, decide to focus on English majoring students in social English classes by virtue of the following rationales.

First and foremost, collecting data from students in the campus of ULIS could be convenient together with time saving since the researchers are currently third-year students of the university. Furthermore, since gamification has been assumed to be utilized for the sake of entertainment coupled with creating an enjoyable and comfortable environment for learners while studying, the scholars have made a decision on being engrossed in social English classes. Last but not least, students in ULIS spend the first two years developing the major language comprehensively, then devoting the next two years to learning specialized subjects related to the choice of career. To be specific, it is believed that sophomores have experienced gamification in physical classes as well as in online classes due to the fact that the program of the second-year students does not embrace detailed specialised knowledge. Because of the aforementioned grounds, the researchers believe that English majoring sophomores in social English classes would benefit the most.

### **3.4 Data collection instruments**

With a view to generalizing the findings of the survey, the researchers strove to contact as many participants as possible. To be specific, from the researchers' perspective, questionnaires could be administered in large numbers in a fairly short amount of time and be economical. In addition to time as well as cost effectiveness, the data collected from questionnaires could easily be visualized and analysed, especially by utilizing the modern computer software (SPSS). Owing to the aforementioned benefits, a face-to-face questionnaire was opted as a data collection instrument.

#### **Structured questionnaires**

In pursuance of the reliability along with validity of the questionnaires, the researchers have deliberated piles of research regarding gamification in teaching as well as learning English. To address the question regarding FELTE, ULIS sophomores' perception of gamification's effectiveness in English classes, the scholars extracted a five-point Likert scale from the two studies of Tan, Ganapathy and Mehar (2018) together with Bicen and Kocakoyun (2018). In terms of *the most effectively used elements when gamification is applied in social English classes*, the questionnaires from the research of Yildirim (2017) were employed. The utilization of questionnaires of famous researchers in the field along with appropriate modifications meant that the validity, reliability and contextual pertinence of the survey were ensured. Another aspect to be tackled was aestheticism. The researchers effortly formatted and provided concise instructions to the participants so as to render the questionnaires as professional as possible.

#### **(1) Question 1: What is FELTE, ULIS sophomores' perception of gamification's effectiveness in English classes?**

In order to answer the first research question regarding *FELTE, ULIS sophomores' perception of gamification's effectiveness in English classes*, the researchers adopted a five-point Likert scale involving a set of 25 items from two previous studies, one of Tan et al. (2018) and the other of Bicen and Kocakoyun (2018). To clarify, 25 closed format questions were categorized in terms of language learning as well as soft skills. This scale ranged from 'strongly disagree' to 'strongly agree' (1 = *Strongly Disagree*; 2 = *Slightly disagree*; 3 = *Neutral*; 4 = *Slightly agree*; 5 = *Strongly Agree*).

- 20 close-ended questions indicated sophomores' views towards aspects of language learning involving vocabulary, grammar, pronunciation and four macro skills. All of which were modified to fit participants' social English syllabus named 3A course guide.

- 5 closed questions regarding soft skills, namely rapid-thinking ability, team work, time management and self-expression, were meticulously selected and replicated from the earlier survey.

To measure reliability of the first set of questions, the researchers utilized the SPSS software (Statistical Package for Social Sciences), specifically *Cronbach's alpha*



as a means of checking internal consistency reliability. The reliability of data pertaining to the variables was designated via Cronbach's Alpha coefficient which received a value between 0 and 1. The higher the Alpha value, the more reliable the designed scale is. Based on data collected, the value of the scale of all variables calculated was approximately 0.897, which implied that the questionnaire is highly 'reliable'.

**(2) Question 2: What elements are most effectively used when gamification is applied in English classes at FELTE, ULIS as perceived by the students?**

The questionnaires from the researcher Yildirim (2017) were employed with the aim of unearthing *the most effectively used elements when gamification is utilized in English classes*. The items of the survey were categorized into three main segments namely Dynamics, Mechanics and Components. Dynamics exercised in design were *logic of the process* and *emotions*. Mechanics contained *competition* coupled with *cooperation*. Components of game design, which were *points*, *medals* as well as *badges*, were integrated.

The instrument of the study consisted of 14 items partitioned into seven main dimensions. Half of them were in a positive manner, while the other half were in a negative manner. This feature assisted the researchers to avert various biases inherent in survey research as this tactic ensured that respondents reacted to both positively and negatively worded survey items. In addition, this practice aided in precluding response sets where respondents promptly provide the same response without truly reading the question.

Once a pilot study was conducted with eight participants, two dimensions including *advancement structure* and *level* were omitted due to their uncommon practice under the defined settings besides allowing the length of the questionnaire to be favorable. Furthermore, the majority of the items were amended in order to best suit the level of participants' understanding.

Last but not least, taking the reliability of the second set of questions into account, the SPSS calculation was again employed. The alpha value obtained was 0.835, which suggested that the reliability was high.

#### **4. FINDINGS AND IMPLICATIONS**

In this section, the findings, analysis and interpretation of the data in terms of FELTE, ULIS sophomores' perception of gamification's effectiveness in English classes and *the most effectively used elements when gamification is applied in social English classes* are presented by the researchers.

Descriptive statistics were employed to measure gamification's effectiveness in English classes and *the most effectively used elements when gamification is applied in social English classes*. For case of statistical analysis, the *mean* score that indicated students' viewpoints of gamification's effectiveness were grouped under five intervals: strongly disagree, slightly disagree, neutral, slightly agree and strongly agree:

<b>Interval range</b>	<b>Agreement level</b>
<b>1.00-1.79</b>	Strongly disagree
<b>1.80-2.59</b>	Slightly disagree
<b>2.60-3.39</b>	Neutral
<b>3.40-4.19</b>	Slightly agree
<b>4.20-5.00</b>	Strongly agree

#### **4.1 Question 1: What is FELTE, ULIS sophomores' perception of gamification's effectiveness in English classes?**

Since the participants of this research are sophomores in FELTE, ULIS (University of Languages and International Studies) in social English classes, the researchers adopted a five-point Likert scale involving a set of 25 items from two previous studies, one of Tan et al. (2018) and the other of Bicen and Kocakoyun (2018). The scholars thereupon modified the questionnaires on the basement of Course Guide 3A. Therefore, gamification's effectiveness in English classes could be categorized into 5 subgroups: vocabulary, pronunciation, grammar, four macro skills together with soft skills.

As can be seen from the data, there were 56% (14/25) given questions at which participants chose *slightly agree* as the most popular option, while in 44% (11/25) of the situations, respondents held a *neutral* attitude toward gamification's effectiveness. This data proves that FELTE sophomores concur that gamification does facilitate their language learning as well as core skill improvement, which is in accordance with Hojjat Dehghanzadeh's suggestion (2019) that gamification exerts positive effects on learners' learning experiences and their learning outcomes.

Regarding the estimate of dispersion, the standard deviation ranged marginally from 0.9 to 1.1, which was a comparable value, indicating that the individual responses are clustered relatively close to the mean.

##### **4.1.1 Vocabulary**

A prominent characteristic of this group is that the percentage of *slight agree* out of five frequent levels is highest (ranging from 36 to 39% for each statement), mainly followed by that of *neutral* level (ranging from 20 to 30%). These statistics echo findings by Sze Lui LAM that gamification improved students' attitudes towards learning vocabulary. Only for the statement "The topic of vocabulary taught in gamification is relevant to the content of the lesson.", the proportion of participants who remain *neutral* is outweighed by that of surveyees who *strongly agree*. Gamification could conclusively provide learners with a platform for acquiring vocabulary related to the lesson coupled with enhancing learners' topic-based vocabulary.

##### **4.1.2 Grammar**

Regarding this item, the statistic depicted that 36.4% (N=80) of the respondents held a neutral belief towards the notion that gamification could facilitate their grammatical

structures learning process. Followed by that, 35.9% of the partakers shared the positive viewpoint regarding their grammar learning, which bears a slight resemblance to Hashim et al. (2019). The results of the study belonging to Hashim depicted that gamified-learning was effective in teaching as well as learning grammar to ESL learners. The result could be attributed to the explanation that games provide a competitive platform for learners to fully engage in the game. Indeed, grammar is a complex component in a language, whereby teaching and learning of grammar are difficult. Ibrahim (2016) emphasized that in order to accomplish a higher proficiency in ESL, grammar learning was a must. The teaching of grammar should be fun to provide learners with better performance.

#### **4.1.3 Pronunciation**

With regard to pronunciation, the notion “Gamification helps me gain knowledge about pronunciation.” possessed the response *neutral* ranked first, at 37.7%. These statistics are somehow humble compared to previous findings of Cristian Tejedor-García (2018) that the high relative percentage of participants agreed that the use of gamification was conducive to an improvement in L2 pronunciation and phoneme discrimination among users.

#### **4.1.4 Four macro skills**

Most of the participants concurred that applying gamification during the class time rendered the lessons engaging and entertaining, which is consistent with the view of (Lynch, 2017) that gamification in education could improve motivation and engagement. Game elements such as immediate feedback and earning badges for completing the challenges successfully were strongly influential on increasing the students’ drive in engaging in these games even within the walls of a classroom.

To be specific, the analyzed data displayed that nearly 40% of the participants determined that gamification could improve their reading skill and facilitate them to possess a better understanding reading lesson. In terms of listening and speaking classes, learners possessed a neutral attitude towards the effectiveness of gamification during the lesson. However, when it came to writing lessons, partakers assumed that gamification did provide them with better understanding of the lesson yet not to improve their writing skill.

#### **4.1.5 Soft skills**

Among these four core skills namely rapid-thinking abilities, information exchange, time-management skill, and self-expression, rapid-thinking abilities reflected the most noticeable improvement. In particular, nearly 70% of the participants aligned with the fact that their rapid-thinking abilities could be enhanced due to gamification. This result is explicable as learners had to complete the tasks or answer the questions within the small amount of time during gamified-lesson with a view to winning a score.

Moreover, gamification could provide learners with a comfortable platform for exchanging information coupled with self-expression. Learners, nevertheless,

possess a neutral attitude towards the idea that gamification could improve their time-management skill.

#### **4.2 Question 2: What elements are most effectively used when gamification is applied in English classes at FELTE, ULIS as perceived by the students?**

Since the instrument of the second research question consisted of 14 items; half of them were in a positive manner, while the other half were in a negative manner, *the mean* of each item was assessed so that a big picture could be formed. As can be seen from the statistic, the *mean* value of every item ranged from 3.5 to 3.8, categorized as *slightly agree* to all positively-worded statements. At the same time, the data indicated that participants either slightly disagreed or stayed neutral with negatively-worded statements as *mean* ranged from 2.3 to 2.8, which suggested certain consistency that participants generally had a positive attitude to the gamification process. This aligns with Muntean's emphasis (2011) that learners present a positive attitude towards gamification.

Furthermore, for the sake of favorable analysis, data from 7 positive-direction dimensions involving *logic of the process, emotions, competition, cooperation, achievement point, medals and badges* were closely observed. First, it was noticeable that both mode (the most-often-received score) and the median (the score that splits the group 50/50) received the value of 4.0, again meaning that students tended to slightly agree on the statements. Regarding the estimate of dispersion, the standard deviation ranged marginally from 0.9 to 1.1, which was a comparable value, indicating that the individual responses are clustered relatively close to the mean.

To dig deeper, while the most effectively used elements were perceived to be emotions towards the procedure, achievement point and logic of the process; badges coupled with medals had least influence on the students.

##### **4.2.1 Top three most effectively used elements**

Considering the level of agreement, 3 items namely *emotions towards procedure, achievement point* and *logic of the process* were categorized into the *most effectively used* group.

A prominent characteristic of this group was that the *mean* score was around 3.8, ranking highest out of all items. Two dimensions belonged to Dynamics while the other was under Components. These statistics echo findings by Yildirim (2017) that the students had a general positive notion about the educational gamification practice, the leading elements of which were logic of the process, emotions towards the procedure, achievement points, and badges.

To be more detailed, the analyzed data showed that roughly 34.1% (N=75) of participants slightly agreed that they were 'pleased to participate in a lesson with gamification' while 31.4% (N=69) strongly agreed. This result supports findings of Toda et al. (2018) that most of the students are pleased with the gamified course. This significant percentage can be explained as gamification has been well-known for motivating and engaging players.

Ranked second, 'Points awarded during the gamification session are encouraging.' received 39.5% *slightly agree* and 26.8% *strongly agree* responses. The highly evaluated position of achievement points here was remarkable as Attali and Arieli-Attali (2015) reach the conclusion that achievement scores alone have no influence during the gamification procedure.

The third dimension that was deemed most valuable was logic of the process 'A gamified presentation of the lesson makes learning more effective'. The answer *slightly agree* made up the most at 35.5% (N=78), followed by the option *strongly agree* at 29.1%.

#### **4.2.2 Two dimensions that had least influence**

With regard to elements that least affected students' learning, both *medals* and *badges* attained modest mean scores at 3.59 and 3.55 respectively. Specifically, for 'Hoping to be in the leaderboard improves my commitment during the gamification session' statement, the answer *slightly agree* made up for 37.7% (N=83), which was the highest percentage among the 5 options. Besides, virtually half of the respondents (43.6%) *slightly agreed* that 'I try to receive preferences during the gamification session'. Strikingly, a smaller proportion of participants (32.3%, N=71) reported that they neither agreed or disagreed on both items.

The researchers predicted that the mean scores indicating students' positive attitudes of gamification's effectiveness would be significantly higher. Our results, nevertheless, received not so distinctive mean scores, even several neutral viewpoints. There might be several explanations for the result. First and foremost, there were differences in methodology among researchers. For instance, some utilized empirical research, while ours applied survey research. Second, while gamification is still considered a novel practice, especially in the context of social studies, our setting was at FELTE - ULIS, where a gamified environment has not been systematically applied. Besides, teachers perhaps apply it subconsciously, not intentionally. Another plausible reason for the findings is that the participants were sophomores, who at the level of tertiary education possibly consider learning an uneasy process, therefore, a gamified lesson to them does not considerably matter. Last but not least, the number of participants in this study is quite restricted (220/614). Such a small number of respondents, to some extent, limits the generalizability of the results.

## **5. CONCLUSION**

### **5.1 Summary of the study**

The study was conducted with an aim to discover sophomores' perception of gamification in English classes at Faculty of English Language Teacher Education in University of Languages and International Studies. Simultaneously, the researchers hoped to inspect the most effectively used element of gamification in social English classes. Via the analysis of data collected from 220 respondents to the questionnaire, the researchers were able to answer each of two research questions.

Regarding the first research question about FELTE, ULIS sophomores' perception of gamification in English classes, above one third of them agree that gamification could enhance their topic-based vocabulary while over half of the respondents held a neutral and positive attitude toward the idea that gamification could accelerate their grammar learning. Most of the partakers also agreed that gamification renders the lessons attractive and entertaining. Specifically, nearly half of the respondents proposed that gamification assisted them in acquiring a better reading comprehension skill. The participants' writing competence, conversely, witnessed little or almost no improvement. While rapid-thinking abilities, information exchange and self-expression were bettered through gamification, the participants showed an unbiased viewpoint towards the theory that gamification could enhance their time-management skill.

In terms of the second research, questions about the most effectively used element of gamification, emotions towards the procedure, achievement point and logic of the process were identified as the most useful elements, whereas badges together with medals had the least impact on the students.

## **5.2 Implications**

This study can contribute to the understanding about students' perception of gamification in English classes as initially, students are willing to experience a gamified environment. Second, it provides a general framework for teachers regarding the starting point and to which features to attribute more significance when gamifying their classes, particularly emotions and logic of the process. Since the impact of gamification varies according to the specific individualities, the related context should be primarily elucidated. In other words, practitioners must determine participants' background, age, gender, learning domain, time needed, etc. in order to design the meaningful and effective gamification process. Last, some following recommendations could be taken into consideration by the future researchers of this topic to make their research results more conclusive. In particular, it is suggested that further research be conducted on a larger scale of the results and future researchers extend this research to other samples in other localities to enhance the generalizability.

## **REFERENCES**

- Alomari, I., Al-Samarraie, H., & Yousef, R. (2019). The Role of Gamification Techniques in Promoting Student Learning: A Review and Synthesis. *Journal of Information Technology Education: Research*, 18, 395–417. <https://doi.org/10.28945/4417>
- Attali, Y., & Arieli-Attali, M. (2015). Gamification in assessment: Do points affect test performance? *Computers & Education*, 83(2015), 57-63.
- Babbie, E. R. (1990). *Survey research methods*. Wadsworth Publishing Company.
- Bicen, H. & Kocakoyun, Ş. (2018). Perceptions of Students for Gamification Approach:



- Kahoot as a Case Study. *International Journal of Emerging Technologies in Learning (IJET)*. 13. 72. 10.3991/ijet.v13i02.7467.
- Bunchball, I. (2010). Gamification 101: An introduction to the use of game dynamics to influence behavior. *White paper*, 9.
- Creswell, J. (2002). *Educational research: Planning, conducting, and evaluating Quantitative and Qualitative research*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Dale S. (2014) Gamification: Making work fun, or making fun of work? *Business Information Review*. 31(2):82–90.
- Davis, K., Sridharan, H., Koepke, L., Singh, S., & Boiko, R. (2018). Learning and engagement in a gamified course: Investigating the effects of student characteristics. *Journal of Computer Assisted Learning*, 34(5), 492- 503. <https://doi.org/10.1111/jcal.12254>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness. *Proceedings of the 15th International Academic MindTrek Conference on Envisioning Future Media Environments - MindTrek 11*, 9-15. <https://doi.org/10.1145/2181037.2181040>
- Ding, L., Kim, C., & Orey, M. (2017). Studies of student engagement in gamified online discussions. *Computers & Education*, 115, 126-142. <https://doi.org/10.1016/j.compedu.2017.06.016>
- Garcia, L. (2017). Gamification in English teaching in primary education (PhD Dissertation). University of Valladolid, Spain. Retrieved from <https://uvadoc.uva.es/bitstream/10324/29552/1/TFG-O-1222.pdf>
- Hashim, H., Rafiq, K. R. M., & Yunus, M. M. (2019). Improving ESL Learners' Grammar with Gamified-Learning. *Arab World English Journal (AWEJ) Special Issue on CALL* (5). 41-50
- Hojjat, D., Hashem, F., Javad, H., Ebrahim, T. & Omid, N. (2019): Using gamification to support learning English as a second language: asystematic review, *Computer Assisted Language Learning*.
- Ibrahim, N. (2016). Games for Teaching Grammar to Young Learners. *Indonesian Journal of Integrated English Language Teaching (IJIELT)*, 2, (1), 49-63.
- Jayasinghe, U., & Dharmaratne, A. (2003). Game Based Learning vs . Gamification From the Higher Education Students' Perspective. <https://doi.org/10.1109/TALE.2013.6654524>
- Kapp, K. M. (2012). *The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education*. Wiley.
- Lee, J. J., & Hammer, J. (2011). Gamification in education: What, how, why bother? *Academic Exchange Quarterly*, 15(2), 146.
- Millis, K., Forsyth, C., Wallace, P., Graesser, A. C., & Timmins, G. (2017). The impact of game-like features on learning from an intelligent tutoring system. *Technology*,

*Knowledge and Learning*, 22(1), 1–22. doi:10.1007/s10758-016-9289-5

- Muntean, C. I. (2011). Raising engagement in e-learning through gamification. *The 6th International Conference on Virtual Learning ICVL*.
- Tan, D. & Ganapathy, M. & Mehar Singh, M. K. (2018). Kahoot! It: Gamification in Higher Education. *Pertanika Journal of Social Science and Humanities*. 26. 565-582.
- Tejedor-García, C., Cardeñoso-Payo, V., Machuca, M. J., Escudero-Mancebo, D., Ríos, A., & Kimura, T. (2018). Improving Pronunciation of Spanish as a Foreign Language for L1 Japanese Speakers with Japañol CAPT Tool. *IberSPEECH 2018*. doi:10.21437/iberspeech.2018-21
- Toda, A., Carmo, R., Silva, A., Bittencourt, I. & Isotani, S. (2018). An approach for planning and deploying gamification concepts with social networks within educational contexts. *International Journal of Information Management*. 46. 10.1016/j.ijinfomgt.2018.10.001.
- Werbach, K., & Hunter, D. (2012). *For the win: How game thinking can revolutionize your business*. Wharton Digital Press.
- Werbach, K., & Hunter, D. (2015). *The gamification toolkit: Dynamics, mechanics, and components for the win*. Wharton Digital Press.
- Yildirim, I. (2017). Students' Perceptions about Gamification of Education: A Q-Method Analysis. *TED EĞİTİM VE BİLİM*. 42. 10.15390/EB.2017.6970.
- Zicherman, G., & Cunningham, C. (2011). *Gamification by design: Implementing game mechanics in web and mobile apps* (1st ed.). O'Reilly Media